



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/750,978

12/31/2003

John J. Shin

047711-0335

5462

23392 7590 07/02/2009

FOLEY & LARDNER
555 South Flower Street
SUITE 3500
LOS ANGELES, CA 90071-2411

EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

07/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/750,978	Applicant(s) SHIN ET AL.	
	Examiner ADITYA BHAT	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 26-49 and 57-61 is/are pending in the application.
- 4a) Of the above claim(s) 37 and 39-42 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 26-36, 38, 43-49 and 57-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status

1. Claims 1-16, 26-49 and 57-61 are currently pending in this application. Claims, 37 and 39-42 have been withdrawn from further consideration in response to a restriction requirement. The claims should indicate that they are withdrawn. Claim 17-25 and 50-56 have been cancelled.

Information Disclosure Statement

2. No information disclosure statement (IDS) was submitted with the response dated 3/13/2009.

Drawings

3. The drawings submitted on 12/31/2003 are in compliance with 37 CFR § 1.81 and 37 CFR § 1.83 and have been accepted by the examiner.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4, 7-10, 12-16, 26-30, 33-36, 38, 43-46, 49 and 57-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Schulman et al. (USPN 5,497,772)

With regards to claims 1 and 43, Schulman et al. (USPN 5,497,772) teaches method and apparatus for verifying the integrity of sensor data comprising:

receiving a first data value from the sensor; (256; figure 11)

Art Unit: 2863

comparing a first parameter relating to the first data value to a first threshold value; (278;figure 11)

receiving a second data value from the sensor; (256;figure 11)

comparing a first parameter relating to the second data value to the first threshold value; (278;figure 11)

continuing receipt of data from the sensor when the first parameter relating to the first data value exceeds the first threshold value and the first parameter relating to the second data value does not exceed the first threshold value;(col. 2-3, lines 62-67 &1-4) and

terminating receipt of data from the sensor when the first parameter relating to the first data value and the first parameter relating to the second data value exceed the first threshold value. (282;figure 11) (setable limits; col. 3, lines 57-59)

With regards to claims 2, 8, 27, 44, and 58, Schulman et al. (USPN 5,497,772) teaches the sensor is a glucose sensor. (256; figure 11)

With regards to claims 3, 9, 28, 45, and 59, Schulman et al. (USPN 5,497,772) teaches the data value is a blood glucose concentration. (304; figure 12)

With regards to claims 4, 10, and 46 Schulman et al. (USPN 5,497,772) teaches discarding the first data value when the first parameter relating to the first data value exceeds the first threshold value and the first parameter relating to the second data value does not exceed the first threshold value. (setable limits; col. 3, lines 57-59)

With regards to claims 7 and 49 Schulman et al. (USPN 5,497,772) teaches

comparing a second parameter relating to the first data value to a second threshold value; (278, loop; figure 11)

continuing receipt of data from the sensor when the first parameter relating to the first data value exceeds the first threshold value, the second parameter relating to the first data value exceeds the second threshold value, and the first parameter relating to the second data value does not exceed the first threshold value; (col. 2-3, lines 62-67 &1-4) and

terminating receipt of data from the sensor when the first parameter relating to the first data value exceeds the first threshold value, the second parameter relating to the first data value exceeds the second threshold value, and the first parameter relating to the second data value exceeds the first threshold value. (282;figure 11) (setable limits; col. 3, lines 57-59)

With regards to claims 12 &13 Schulman et al. (USPN 5,497,772) teaches terminating receipt of data from the sensor occurs when first parameter relating to the second data value exceeds the first threshold value within a predetermined period of time. (col.13, lines 10-15)

With regards to claims 14 -16, and 33-34, Schulman et al. (USPN 5,497,772) teaches the first/second threshold varies depending on the blood glucose concentration. (setable limits; col. 3, lines 57-59)

With regards to claims 26 and 57, Schulman et al. (USPN 5,497,772) teaches a method and apparatus for calibrating a sensor comprising:

receiving a plurality of data values from the sensor; (302;figure 12)

Art Unit: 2863

determining the reliability of each data value of the plurality of data values;
(312;figure 12)

discarding data values of the plurality of data values that are unreliable;
(normalize; figure 12)

filtering the data values of the plurality of data that have not been discarded;
(normalize; figure 12)and

adjusting an output of the sensor using the filtered data values.(310; figure 12)

With regards to claims 29-30 and 60-61, Schulman et al. (USPN 5,497,772) teaches determining the reliability of each data value comprises comparing each data value to a predetermined threshold. (278;figure 11)

With regards to claim 35, Schulman et al. (USPN 5,497,772) teaches discarding data values that do not meet a pre-established criterion related to the predetermined threshold. (normalize; figure 12)

With regards to claim 36, Schulman et al. (USPN 5,497,772) teaches filtering the data values comprises filtering the data values with an adaptive filter. (col. 17, lines 60-63)

With regards to claim 38, Schulman et al. (USPN 5,497,772) teaches filtering the data values with an adaptive filter comprises using the adaptive filter with a parameter based on the data values of the plurality of data that have not been discarded. (col. 17, lines 55-65)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5-6, 11, 31-32 and 47-48 are rejected under 35 U.S.C. 103(a) as being obvious over Schulman et al. (USPN 5,497,772) in view of Riedel (USPN 6,069,011).

With regards to claims 5-6,11,31-32 and 47-48 Schulman et al. (USPN 5,497,772) does not appear to teach first and second order derivatives.

Riedel (USPN 6,069,011) teaches first and second order derivatives.

It would've been obvious to one of ordinary skill in the art at the time of the invention to modify the Schulman et al. (USPN 5,497,772) invention to include first and second order derivatives taught by Riedel (USPN 6,069,011) in order to get a more accurate reading of the desired parameter.

Response to Arguments

8. Applicant's arguments, specifically the Declaration filed under 37 CFR 1.132 and the declaration under 35 USC 103 (c) filed 3/13/2009, with respect to the rejection(s) of claim(s) 1-16, 26-49 and 57-61, under 102 (e) and 103 (a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Schulman et al. (USPN 5,497,772) and Schulman et al. (USPN 5,497,772) in view of Riedel (USPN 6,069,011).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Przybylski (USPN 6,424,873) teaches systems and methods for limiting integral calculation components in PID controllers.

10 ny inquiry concerning this communication or earlier communications from the examiner should be directed to ADITYA BHAT whose telephone number is (571)272-2270. The examiner can normally be reached on 9:30-5:30.

11 If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aditya Bhat/
Examiner, Art Unit 2863

Application/Control Number: 10/750,978

Page 8

Art Unit: 2863

July 1, 2009